Serial No.: 10/051,475 Examiner: Hieu C. Le

Amendment to the Claims

1 - 15. (Canceled)

- 16. (Previously Amended) A method for facilitating multicasting of a file to a plurality of end users, comprising:
 - multicasting service control information for reception by a plurality of end user download devices, wherein multicasting said service control information includes receiving said service control information initially transmitted from a centralized control apparatus over a single unidirectional communication path, generating replicated versions of said service control information by a multicast-capable distribution network and forwarding said replicated versions of said service control information for reception by each one of the group of said end user download devices;
 - configuring the multicast-capable distribution network to route said service control information by downstream apparatuses within the multi-cast capable network in response to receiving said service control information;
 - receiving a plurality of requests for reception of offered content designated in said service control information, wherein said offered content is transmitted from said centralized control apparatus wherein said requests are received from a group of said end user download devices; and
 - multicasting said offered content for reception by each one of said end user download devices in the group;
 - wherein said group of end user download devices and said multi-cast distribution network are cooperable for using information learned from said service control information for connecting said group of end user download devices to said offered content without said group of end user download devices communicating to said centralized control apparatus.
- 17. (Previously Amended) The method of claim 16 wherein receiving said service control information from the centralized control apparatus includes receiving an unsolicited advertisement of said service control information from the centralized control apparatus.

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18. (Previously Amended) The method of claim 16 wherein configuring the multicast-

capable distribution network includes being statically configured for routing said service control

information along pre-defined paths within the multi-cast capable distribution network.

19. (Previously Amended) The method of claim 16 wherein configuring the multicast-

capable distribution network includes being configured for dynamically enabling access to said

service control information by downstream apparatuses within the multi-cast capable network.

20. (Previously Amended) The method of claim 16 wherein said group of end user

download devices waits for a random interval between 0 second and a prescribed interval of time

before sending the request, wherein the prescribed interval of time begins at a designated time

and extends for a designated duration.

21. (Previously Amended) The method of claim 20 wherein receiving the plurality of

requests for reception of a file designated in said service control information includes facilitating

synchronization of the group of said end user download devices for enabling reception of said

requests by the multicast-capable distribution network within the prescribed interval of time.

22. (Original) The method of claim 21 wherein facilitating synchronization of the group of

said end user download devices includes:

synchronizing a clock of each one of said end user download devices with a reference

time maintained by the multicast-capable distribution network; and

synchronizing a clock of a multicast server apparatus with the reference time maintained

by the multicast-capable distribution network.

23. (Original) The method of claim 16, further comprising:

facilitating synchronization of the group of said end user download devices for enabling

reception of said requests by the multicast-capable distribution network within a

prescribed interval of time.

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24. (Previously Amended) The method of claim 23 wherein:

receiving the plurality of requests for reception of a file designated in said service control information includes receiving said requests within the prescribed interval of time; and

the prescribed interval of time beginning at a designated time and extending for a designated duration.

25. (Original) The method of claim 16 wherein multicasting said offered content includes: receiving an initially transmitted copy of said offered content from a centralized control apparatus;

generating replicated versions of said offered content, wherein said replicated versions are generated by the multicast-capable distribution network; and

forwarding said replicated versions of said offered content for reception by each one of the group of said end user download devices.

26-40. (Canceled)

- 41. (Previously Amended) A data processor program product for facilitating multicasting of a file to a plurality of end users, comprising:
 - a data processor program processable by a data processor of a multicast-capable distribution network;
 - a memory from which the data processor program is accessible by the data processor; and

the data processor program being capable of enabling the data processor to facilitate multicasting service control information for reception by a plurality of end user download devices;

receiving a plurality of requests for reception of offered content designated in said service control information, wherein said requests are received from a group of said end user download devices to said multicast-capable distribution network, wherein said group of end user download devices and said multicast-capable distribution network are cooperable

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for using information learned from said service control information for

connecting said group of end user download devices to said offered

content without said group of end user download devices

communicating to said centralized server;

receiving said service control information initially transmitted from a

centralized control apparatus over a unidirectional communication path;

generating replicated versions of said service control information, wherein

said replicated versions are generated by the multicast-capable distribution

network

42. (Canceled).

43. (Previously Amended) The data processor program product of claim 41 wherein

enabling the data processor to facilitate receiving said service control information from the

centralized control apparatus includes enabling the data processor to facilitate receiving an

unsolicited advertisement of said service control information from the centralized control

apparatus.

44. (Canceled).

45. (Previously Amended) The data processor program product of claim 41 wherein

enabling the data processor to facilitate configuring the multicast-capable distribution network

includes enabling the data processor to facilitate statically configuring the multicast-capable

distribution network for routing said service control information along pre-defined paths within

the multicast-capable distribution network.

46. (Previously Amended) The data processor program product of claim 41 wherein

enabling the data processor to facilitate configuring the multicast-capable distribution network

includes enabling the data processor to facilitate dynamically enabling the multicast-capable

distribution network for accessing said service control information by downstream apparatuses

within the multicast-capable distribution network.

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47. (Previously Amended) The data processor program product of claim 41 wherein

enabling the data processor to facilitate receiving the plurality of requests for reception of a file

designated in said service control information includes enabling the data processor to facilitate

receiving said requests within a prescribed interval of time.

48. (Original) The data processor program product of claim 47 wherein the prescribed

interval of time begins at a designated time and extends for a designated duration.

49. (Previously Amended) The data processor program product of claim 47 wherein

enabling the data processor to facilitate receiving the plurality of requests for reception of a file

designated in said service control information includes enabling the data processor to facilitate

synchronization of the group of said end user download devices for enabling reception of said

requests by the multicast-capable distribution network within the prescribed interval of time.

50. (Original) The data processor program product of claim 49 wherein enabling the data

processor to facilitate synchronization of the group of said end user download devices includes

enabling the data processor to facilitate:

synchronizing a clock of each one of said end user download devices with a reference

time maintained by the multicast-capable distribution network; and

synchronizing a clock of a multicast server apparatus with the reference time maintained

by the multicast-capable distribution network.

51. (Original) The data processor program product of claim 41 wherein the data processor

program is further capable of enabling the distribution network to facilitate:

synchronization of the group of said end user download devices for enabling reception of

said requests by the multicast-capable distribution network within a prescribed

interval of time.

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- 52. (Previously Amended) The data processor program product of claim 51 wherein:
 - enabling the data processor to facilitate receiving the plurality of requests for reception of a file designated in said service control information includes enabling the data processor to facilitate receiving said requests within the prescribed interval of time; and
 - the prescribed interval of time beginning at a designated time and extending for a designated duration.
- 53. (Original) The data processor program product of claim 41 wherein:
 - the multicast-capable distribution network is an Internet Protocol (IP) based distribution network; and
 - enabling the data processor to facilitate receiving the plurality of requests for reception includes enabling the data processor to facilitate receiving an Internet Group Management Protocol IGMP membership report from each one of the group of said end user download devices.
- 54. (Previously Amended) The data processor program product of claim 53 wherein the data processor program is further capable of enabling the data processor to facilitate:
 - receiving said service control information from a centralized control apparatus in response to receiving the IGMP membership report from each one of the group of said end user download devices.
- 55. (Original) The data processor program product of claim 41 wherein enabling the data processor to facilitate multicasting said offered content includes enabling the data processor to facilitate:
 - receiving an initially transmitted copy of said offered content from a centralized control apparatus;
 - generating replicated versions of said offered content, wherein said replicated versions are generated by the multicast-capable distribution network; and
 - forwarding said replicated versions of said offered content for reception by each one of the group of said end user download devices.